

AUTHOR: Idlis, G. M. 514

TITLE: On the article by A. M. Mikishin and F. A. Tsitsin "On some problems in the theory of galactic potential". (O stat'ye A. M. Mikishi i F. A. Tsitsina "O nekotorykh voprosakh teorii galakticheskogo potentsiala").

PERIODICAL: "Astronomicheskii Zhurnal" (Journal of Astronomy), 1957, Vol.34, No.2, pp. 298 - 301 (USSR).

ABSTRACT: The article by Mikishin and Tsitsin (1), which operates with negative (!) densities of matter in discussing galactic models, is shown to be physically groundless. It is noted that all their "critical remarks" in connection with the work of P. P. Parenago and G. M. Idlis are based on a misunderstanding and misinterpretation of the Newtonian potential in its generally accepted sense. All the four deductions given by Mikishin and Tsitsin are erroneous. Their attempt to contrast the theories of the galactic potential of Parenago and Idlis is a result of a trivial misunderstanding. It is pointed out that the graphs given in this article appear to have little connection with the formulae in the text, and in some cases even contradict them. 12 references, all of which are Russian.

Astrophysical Institute,
Ac. Sc., Kazakhstan.

Recd. Feb.18, 1956.

AUTHOR: Idlis, G. M. 33-5-8/12

TITLE: On the Evolutionary Interpretation of the Main Sequence Stars. (Ob Evolyutsionnoy Interpretatsii Glavnoy Posledovatel'nosti Zvezd.)

PERIODICAL: Astronomicheskii Zhurnal, 1957, Vol.34, No.5, pp. 755-769. (USSR)

ABSTRACT: If, as is generally accepted, evolution takes place during the life of stars (mainly continuous shift on the spectrum-luminosity diagram) then all the sequences, including the main sequence, on this diagram should have such an evolutionary character. However, the direction and tempo of stellar evolution and the initial conditions of formation of the corresponding stars and their final states require a special analysis. In this it is insufficient to start as was done in Reference 1 from a single luminosity function $\phi(M)$. In the present paper a survey is given of the main arguments which lead to the idea of corpuscular emission from early stars of the main sequence. An estimate is made of the rate of loss of mass and it is shown that the evolution may be characteristic only of the first part of the main sequence. It is shown that Fesenkov's hypothesis (Refs. 8 and 6) of corpuscular emission as the main factor in stellar evolution appears

33-5-8/12

On the Evolutionary Interpretation of the Main Sequence Stars.

are in general agreement with the results of Aller (Ref. 44) who found that the mean helium content in certain B-stars is of the same order of magnitude. If the bright giants of stellar population of type I are formed from stars similar to those belonging to the early spectral classes of the main sequence then their stellar growth varies between the mean growth of stars belonging to the second part of the main sequence and max, i.e. the dispersion of their peculiar velocities in the galactic plane should be in the range $V = 19\text{km/sec}$ to $V = 25\text{km/sec}$. This is in agreement with the work reported by Williams (Ref. 49) and Wyssotsky (Ref. 50). There are 1 figure, 4 tables and 50 references, 37 of which are Slavic.

SUBMITTED: December, 19, 1956.

ASSOCIATION: Astrophysical Institute of the Academy of Sciences of the ~~Kazakh SSR~~ (Astrofizicheskiy Institut Akademii Nauk KazSSR)

AVAILABLE: Library of Congress.

Card 3/3

IDLIS, G.M.

p. 3

PHASE I BOOK EXPLOITATION

80V/3823
80V/20-M-7

Akademiya nauk Kazakhskoy SSR. Astrofizicheskiy institut

Izvestiya, tom 7 (News of the Astrophysics Institute, Academy of Sciences, Kazakhskaya SSR, Vol. 7) Alma-Ata, 1958. 110 p. Errata slip inserted. 900 copies printed.

Ed.: F.Ya. Osadchiy; Tech. Ed.: Z.P. Rorokina; Editorial Board: G.M. Idlis, M.G. Karimov, Z.V. Karyagina (Secretary), D.A. Rozhkovskiy, and V.G. Fesenkov (Resp. Ed.).

PURPOSE: The book is intended for astronomers and astrophysicists.

COVERAGE: This is a collection of 12 articles. In the first four articles V.G. Fesenkov deals with the formation of stars and planets, describes star chains and dark filaments in the region of galactic nebulae, and reports on the observation of Mars with an 8" refractor during the opposition of 1956, and on photometrical observation of the northern zodiacal light in July 1957 using a visual binocular of the author's design. The remaining articles, written by different authors, deal mainly with problems of spectroscopy such as the scattering of light in the atmosphere in the nearest infrared region of the

Card 1/3

News of the Astrophysics Institute (Cont.)

SOV/3823

Idlis, G.M. Basic Features of the Observed Astronomical Universe as Typical Characteristics of an Inhabitable Cosmic System	39
Nikol'skiy, G.M. Problem of Night Glow in the Red and Green Lines	55
Nikol'skiy, G.Sh. Indicatrix of Light Scattering in the Atmosphere in the Nearest Infrared Region of the Spectrum	65
Tulenkova, L.N. Determination of the Oscillation of Star Images According to Observations of the Observatory of the Astrophysical Institute	74
Obashev, S.O. Polarization of the Prismatic Spectrograph	79
Boyko, P.N. Reflectability of a Magnesium Screen	82
Grifor'yeva, N.B. Investigation of Clusters NGC 752 and NGC 6940	90

AVAILABLE: Library of Congress

Card 3/3

JA/REM/mas
7-15-60

24(0)

AUTHOR:

Idlis, G. M.

SOV/20-122-6-11/49

TITLE:

A Practical Criterion for the Steady or Non-Steady State of Finite Self-Gravitating Star Systems (Prakticheskiy kriteriy statsionarnosti ili nestatsionarnosti konechnykh samogravitiruyushchikh zvezdnykh sistem)

PERIODICAL:

Doklady Akademii nauk SSSR, 1958, Vol 122, Nr 6, pp 997-998 (USSR)

ABSTRACT:

The author investigates a criterion for the applicability or non-applicability of the steady model to a real system of stars with the average density δ . The "circular velocity" of the bodies within the system at a distance r from the center of mass is of the order $v_0 = \sqrt{4/3\pi G \delta} r$.

For the period of revolution it applies analogously that

$$P_0 = \frac{2\pi r}{v_0} \sqrt{\frac{3\pi}{G\delta}}. \text{ On the other hand, the average quadratic}$$

velocity of the stars in the center of mass system is expressed according to the virial theorem (which is applicable to steady

Card 1/3

SOV/20-122-6-11/49

A Practical Criterion for the Steady or Non-Steady State of Finite Self-Gravitating Star Systems

and linearly non-steady systems) is expressed by the mass M of the system and by the radius r in the following manner:

$\sqrt{v^2} = \sqrt{\frac{1GM}{2r}}$, i.e. the period of the oscillation along the mean radius $2r$ of the system is of the order

$P_1 = \frac{4\bar{r}}{\sqrt{v^2}} = \sqrt{\frac{32\bar{r}^3}{GM}} = \sqrt{\frac{24}{\pi G\bar{\rho}}} \approx P_0 \approx \frac{3}{\sqrt{G\bar{\rho}}}$. Consequently, the period $P = \sqrt{\frac{3}{G\bar{\rho}}}$ characterizes the duration of an essential

displacement of the bodies within the system. Every finite cosmic system has at some time been formed from something, and in this sense has a certain age T . The criterion given here ($T \leq P$ for non-steady systems and $T \gg P$ for steady systems) agrees well with the astronomical data given by a table. There are 1 table and 29 references, 22 of which are Soviet.

Card 2/3

SOV/20-122-6-11/49

A Practical Criterion for the Steady or Non-Steady State of Finite Self-Gravitating Star Systems

ASSOCIATION: Astrofizicheskiy institut Akademii nauk KazSSR
(Astrophysical Institute of the Academy of Sciences, Kazakh SSR)

PRESENTED: June 5, 1958, by V. G. Fesenkov, Academician

SUBMITTED: June 5, 1958

Card 3/3

3(1)

AUTHOR:

Idlis, G. M.

SOV/20-123-6-11/50

TITLE:

A General Expression for the Phase Density of Finite Steady Axially Symmetrical Selfgravitating Stellar Systems and Their Differential Axial Rotation (Obshcheye vyrazheniye dlya fazovoy plotnosti konechnykh statsionarnykh osesimmetrichnykh samogravitiruyushchikh zvezdnykh sistem i ikh differentsial'noye osevoye vrashcheniye)

PERIODICAL:

Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 6, pp 994-997 (USSR)

ABSTRACT:

The phase density Ψ (which, according to Liouville's (Liuvill') theorem $D\Psi/Dt = 0$, is an integral of motion) can be represented as an arbitrary function of any complete system of the corresponding independent integrals of motion (theorem of Jeans (Dzhins)). For self-gravitating stellar systems of steady axially symmetrical potential $\Phi = \Phi(R, z)$ the spatial mass density $\delta = \delta(R, z)$, the corresponding Poisson (Puasson) equation

$$4\pi G\delta = -\frac{\partial^2 \Phi}{\partial R^2} - \frac{1}{R} \frac{\partial \Phi}{\partial R} - \frac{\partial^2 \Phi}{\partial z^2} \text{ and, generally speaking, also}$$

Card 1/3

A General Expression for the Phase Density of Finite Steady Axially Symmetrical Selfgravitating Stellar Systems and Their Differential Axial Rotation

SOV/20-123-6-11/50

the phase density $\Psi = \Psi(R, z, v_R, v_z, v_\phi)$ must have analogous properties. δ satisfies the integral equation

$$\delta = \int_{-\infty}^{+\infty} \int_{-\infty}^{+\infty} \int_{-\infty}^{+\infty} \Psi dv_R dv_z dv_\phi.$$

The general expression for such a phase density can contain only single-value axially symmetrical integrals of motions of an individual star as independent arguments. Calculations are discussed in short. In the general case of an axially symmetrical steady potential $\Phi = \Phi(R, z)$, there can and must exist only one single-value integral of motion which does not depend on the energy integral and on the integral of the kinetic motion. The corresponding general expression for Ψ must therefore contain 3 single-value axially symmetrical integrals of motion of an individual star:

$$\Psi = \Psi(I_1, I_2, I_3) = \Psi((1/2)v^2 - \Phi(R, z), Rv_\phi, I_3).$$

Card 2/3

A General Expression for the Phase Density of SOV/20-123-6-11/50
Finite Steady Axially Symmetrical Selfgravitating Stellar Systems and Their
Differential Axial Rotation

The symmetric and the antisymmetric (with respect to v_{ϕ}) parts and the combinations of the quantities v_R and v_z must also be integrals of motion. The possible systematic motions of stellar centroids in steady axially symmetrical stellar systems are reduced only to a differential rotation around a symmetry axis. The calculations discussed in the present paper give results which agree with the kinematic properties of galaxies and the regular extragalactic nebulae. There are 9 references, 8 of which are Soviet.

ASSOCIATION: Astrofizicheskiy institut Akademii nauk KazSSR (Astrophysics
Institute of the Academy of Sciences, Kazakhskaya SSR)

PRESENTED: August 8, 1958, by V. G. Fesenkov, Academician

SUBMITTED: August 8, 1958

Card 3/3

IDLIS, G M.

PHASE I BOOK EXPLOITATION 807/3405

Sveshchaniya po voprosam kosmologii. 6ta, Moscow, 1957

Uchebno-nauchnyy kurs kosmologii i kosmologii; trudy sovetskikh nauchnykh i inostrannykh uchenykh. Moscow, 1957. 1,500 copies printed.

Sponsoring Agency: Akademnaya kniga SSSR.

Ed. of Publishing House: L.V. Zamenkovskiy; Tech. Ed.: G.M. Shvachko; Editorial Board: B.A. Prut-Kamenetskiy (Chairman), P. V. Voronov-Volynskiy, Corresponding Member.

PURPOSE: The book is intended for astronomers and physicists studying problems of general cosmology.

COVERAGE: The book is a collection of papers on cosmology read by scientists participating in a conference held in Moscow on June 5-7, 1957. The papers review recent observational and theoretical work in extragalactic astronomy, gravitational theory, theory of relativity, red shift, radio astronomy, formation of chemical elements, thermodynamics of the universe, entropy, etc. No personalities are mentioned. There are references following each of the reports.

Author: B.A. Prut-Kamenetskiy. Title: Spiral Galaxy M 101. Subject: Reliability of Observational Data in Extragalactic Astronomy. 51

Author: V.I. and P.V. Shvachko. Title: Application of Electromagnetic Optical Methods to Extragalactic Astronomy. 70

Author: V.I. and P.V. Shvachko. Title: Application of Electromagnetic Optical Methods to Extragalactic Astronomy. 89

Author: V.I. and P.V. Shvachko. Title: Application of Electromagnetic Optical Methods to Extragalactic Astronomy. 94

Author: V.I. and P.V. Shvachko. Title: Application of Electromagnetic Optical Methods to Extragalactic Astronomy. 110

Author: V.I. and P.V. Shvachko. Title: Application of Electromagnetic Optical Methods to Extragalactic Astronomy. 116

Author: V.I. and P.V. Shvachko. Title: Application of Electromagnetic Optical Methods to Extragalactic Astronomy. 131

Author: V.I. and P.V. Shvachko. Title: Application of Electromagnetic Optical Methods to Extragalactic Astronomy. 141

Author: V.I. and P.V. Shvachko. Title: Application of Electromagnetic Optical Methods to Extragalactic Astronomy. 144

Author: V.I. and P.V. Shvachko. Title: Application of Electromagnetic Optical Methods to Extragalactic Astronomy. 175

Author: V.I. and P.V. Shvachko. Title: Application of Electromagnetic Optical Methods to Extragalactic Astronomy. 186

Author: V.I. and P.V. Shvachko. Title: Application of Electromagnetic Optical Methods to Extragalactic Astronomy. 192

Author: V.I. and P.V. Shvachko. Title: Application of Electromagnetic Optical Methods to Extragalactic Astronomy. 200

Author: V.I. and P.V. Shvachko. Title: Application of Electromagnetic Optical Methods to Extragalactic Astronomy. 214

Author: V.I. and P.V. Shvachko. Title: Application of Electromagnetic Optical Methods to Extragalactic Astronomy. 270

Author: V.I. and P.V. Shvachko. Title: Application of Electromagnetic Optical Methods to Extragalactic Astronomy. 228

Author: V.I. and P.V. Shvachko. Title: Application of Electromagnetic Optical Methods to Extragalactic Astronomy. 219

Author: V.I. and P.V. Shvachko. Title: Application of Electromagnetic Optical Methods to Extragalactic Astronomy. 243

PHASE I BOOK EXPLOITATION

Akademniya nauk Kazakhskoy SSR. Astrofizicheskiy institut

Izvestiya, tom VIII (News of the Astrophysics Institute, Kazakh SSR Academy of Sciences, vol. 8) Alma-Ata, Izd-vo AN Kazakhskoy SSR, 1959. 850 copies printed.

Eds.: F. Ya. Osadchiy, and Yu. N. Kuznetsov; Tech. Ed.: Z. P. Borokina; Editorial Board: G. M. Idlis, M. G. Karimov, Z. V. Karyagina (Secretary), D. A. Rozhkovskiy, V. G. Posenkov (Resp. Ed.).

PURPOSE: This collection of articles is intended for geophysicists and astronomers.

COVERAGE: This collection of articles in astronomy contains studies on the distribution of asteroids as revealed by zodiacal light characteristics, the distortion of the luminosity curve of a variable star, the integrals of motion of an individual star, the electromagnetic mechanism in solar prominences, sky polarization in the Libyan desert, projector research, etc. English abstracts accompany each article. References follow individual articles.

News of the Astrophysics (Cont.)

SOV/3238

Obashev, S. O. Electromagnetic Mechanism of Heating Solar Prominences	64
Karyagin, Z. V. The Low-Latitude Aurora of September 29-30, 1957	68
Gaynullina, R. Kh. Spectral Photometry in the Red Spectrum Part of the Low-Latitude Aurora on Sept 29-30, 1957	79
Pyaskovskaya-Fesenkova, Ye. V. Some Data on Polarization in the Sky in Southern Egypt	82
Boyko, P. N., G. Sh. Livshits, and T. P. Toropova. Projector Studies of the Indicatrices of Light Scattering	98
Boyko, P. N. Spectroelectrophotometer Equipped With an Automatic Spectrum Recorder	108

AVAILABLE: Library of Congress

Card 3/3

TM/lab
3-15-60

3(1),10(4)

AUTHOR: Idlis, G.M.

SOV/33-36-1-10/31

TITLE: Symmetry of Stationary Axialsymmetric Stellar Systems Relative to the Equatorial Plane

PERIODICAL: Astronomicheskiy zhurnal, 1959, Vol 36, Nr 1, pp 85-88 (USSR)

ABSTRACT: In the present paper the author gives a theoretical proof for the fact that stationary axialsymmetric self-gravitating stellar systems with a finite mass are symmetrical to the equatorial plane.

There are 2 references, 1 of which is Soviet, and 1 German.

ASSOCIATION: Astrofizicheskiy institut Akademii nauk Kaz SSR (Astrophysical Institute of the AS Kazakhskaya SSR)

SUBMITTED: June 5, 1958

IDLIS, G. M.

PHASE I BOOK EXPLOITATION

SOV/4605

Akademiya nauk SSSR. Astrofizicheskiy institut

Izvestiya, tom 10 (News of the Astrophysics Institute of the Academy of Sciences Kazakhskaya SSR) Alma-Ata, 1960. 100 p. 750 copies printed.

Editorial Board: G. M. Idlis, M. G. Karimov, Z. V. Karyagina (Secretary), D. A. Rozhkovskiy, and V. G. Pesenkov (Resp. Ed.); Eds.: L. S. Rzhondkovskaya, and M. Ya. Brailovskaya; Tech. Ed.: V. P. Prokhorov.

PURPOSE: This publication is intended for astrophysicists.

COVERAGE: This is a collection of 13 articles on problems in astrophysics. Individual articles discuss: the forces of gravity, radiative pressure, and inter-reaction of heavenly bodies; the distribution of surface brightness in reflecting nebulae; the relative motion of double stars with corpuscular emission; the photographic determination of the position of the sodium cloud released by the second Soviet cosmic rocket; the relationship between the decrease in the kinetic temperature of the corona and its monochromatic emission in the region of protuberances; the relationship between the velocities of moving sunspot protuberances and variations in their brightness; the ratio of photo-emulsion density to the polarization plane of light falling

Card 1/4

News of the Astrophysics Institute (Cont.)

SOV/4605

at different angles; airglow emissions in the red band spectrum as observed from Alma-Ata; brightness and polarization of the daytime sky observed in the almucantar of the sun in August 1956 in Alma-Ata; the effect of aerosols in the scattering of light in the near-surface layer; the results of an investigation of the absorption function in the p water vapor band; the distribution of energy in the spectrum of the daytime sky. No personalities are mentioned. Each article is accompanied by a brief English summary and references.

TABLE OF CONTENTS:

Idlis, G. M. Force Interaction Between Massive Radiating Bodies	3
Rozhkovskiy, D. A. Photometric Studies of Reflecting Nebulae	15
X Idlis, G. M., and T. B. Omarov. Evolution of the Orbits of Wide Double Stars With Corpuscular Emission	28
Bugoslavskaya, Ye. Ya. (Deceased), K. G. Dzhakusheva, M. G. Karimov, A. V. Kurchakov, V. S. Matyagin, D. A. Rozhkovskiy, and M. A. Svechnikov. Determining the Coordinates of Artificial Comets	36

Card 2/4

84582

S/035/60/000/009/015/016
A001/A001

New Methods of Determining Masses of Cosmic Systems Based on the Relativity Theory Effect

displacement of spectral lines, and b) deflection of light beams in a gravitational field (Einstein effect). In the first case, displacements of spectral lines for very massive or very dense bodies (such as the elliptic galaxy NGC 3115) amounts to ~ 0.4 km/sec, which is within the accuracy limits of the best modern estimates of apparent Doppler velocities of extragalactic nebulae (± 1 km/sec). Studies of large clusters of galaxies are of a greater prospect. Thus for the cluster in Coma Berenices the effect expected must amount to ~ 5 km/sec. The method of determining the masses of cosmic systems from Einstein's effect is of a special interest. It follows thereof, that any distant actually round galaxy, while being observed at an angular distance $\Delta = R/r$ from the center of a closer system with the unknown mass M and separated from us by distance r (R is the linear separation between the objects considered in the image plane) should acquire apparent flattening

$$h^* = \frac{a^* - b^*}{a^*} = \frac{8GM}{c^2 R \Delta} = \frac{8GM}{c^2 r \Delta^2}$$

In this case the apparent major (a^*) and minor (b^*) semi-axes of the distant

Card 2/3

32(

23238
S/035/61/000/006/021/044
A001/A101

3,1560

AUTHOR:

Idlis, O.M.

TITLE:

The connection of general properties of gravitational potential of stellar systems with the general form of motion integrals of an individual star

PERIODICAL:

Referativnyy zhurnal. Astronomiya i Geodeziya, no. 6, 1961, 41, abstract 6A355 ("Izv. Astrofiz. in-ta AN KazSSR", 1959, v. 8, 24-52, Engl. summary)

TEXT:

The author shows that an integral which does not impose any restrictions on gradient of potential ϕ is energy integral necessitating the stationarity of ϕ . If time expired since the origination of a stellar system $T \gg P$, where P is time of an essential displacement of stars in the stellar system, a stationary state sets in. Integrals not dependent explicitly on time t , are divided into two parts: an even and an odd part relative to velocity vector, which, taken separately, represent integrals of motion. Therefore it is always possible to consider an integral independent of t either even or odd. If phase density ψ is a function of energy integral alone, then a self-gravitating stellar system must be spherically

Card 1/2

23938

S/035/61/000/006/021/044
A001/A101

The connection of general properties ..

symmetrical (the proof presented in the paper is erroneous. Reviewer). In the general case of a stationary self-gravitating system, ψ must admit at least one more single-valued integral, independent of t , which can be the argument of ψ . If there are systematic motions of stars in the system, this integral must be odd. It is shown that in this case the system has axial symmetry, and integral is reduced to integral of areas. Assuming the existence of a third independent single-valued integral, the author proves the absence, generally speaking, of other single-valued independent integrals. If the third single-valued integral is quadratic in respect to velocities, the self-gravitating system has a symmetry plane (the proof presented in the paper is erroneous. Reviewer). An attempt is made to derive a theoretical substantiation for Parenago's law of dependence of ψ in the symmetry plane on distance to the symmetry axis. There are 60 references.

G. Kuzmin

[Abstracter's note: Complete translation]

Card 2/2

32043
S/035/61/000/011/026/028
A001/A101

3,1900 (1057, 1172, 1538)

AUTHOR: Idlis, G. M.

TITLE: Force interaction of massive radiating bodies

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 11, 1961, 83 - 84, abstract 11A600 ("Izv. Astrofiz. in-ta, AN KazSSR", 1960, v. 10, 3 - 14, Engl. summary)

TEXT: In addition to forces of gravitational interaction, radiation pressure, and effects of Pointing-Robertson and Radziowski, it is necessary to take into account forces arising due to curvature of trajectories of radiation (both photon and corpuscular one) caused by the gravitational fields of these bodies (Einstein's effect for photons). This curvature of trajectories leads first, to an increase in the effective absorption cross section of the body in comparison with the geometric cross section. Secondly, as a consequence of the change in direction of motion of corpuscles emitted by one body and flying past the second body, projections of corpuscle momenta onto direction r_{12} must change. In virtue of the law of conservation of the total momentum of the system, the gravitating body must experience an additional reaction force F_{12r} . To determine force F_{12r} .

Card 1/5

32043

S/035/61/000/011/026/028

A001/A101

Force interaction of massive radiating bodies

is interesting to note that reaction force (2) balances completely the radiation pressure force already at the distance

$$r_{12}^* = \frac{c^2 R_2^2}{8GM_2}$$

For a body having parameters of the Sun this critical distance is ~ 270 AU. Hence the conclusion can be drawn that in wide binaries all effects of radiation pressure are compensated by the action of reaction force (2). At the distance

$$r_{12}^{**} = \frac{c^3 M_1}{2L_1}$$

force F_{12r} comes up to conventional gravitational force. Besides radiative emission of celestial bodies, it is necessary to take into account also their corpuscular emission. The expression for reaction force arising in this case looks as follows:

$$\vec{F}_{12r}^* \approx - \frac{Gm_1 M_2}{U_1 r_{12}^2} \cdot \vec{r}_{12}, \quad (3)$$

Card 3/5

32043

S/035/61/000/011/026/028

A001/A101

Force interaction of massive radiating bodies

where m_1 is expenditure of mass of body M_2 per unit time, U_1 is velocity of corpuscles, other designations being the same. (An assumption $U_1 \gg \sqrt{2GM_2/R_2}$ was made while deriving formula (3)). A comparison of (3) with (2) shows that in so far as usually $U_1 \ll c$, the corpuscular reaction force (3) may exceed many times (by $c/2U_1$ times) the photon reaction force (2), even at the same rates of mass losses by both bodies of a binary system ($m_1 = \frac{L_1}{2}$). The so-called dynamical friction force has an analogous nature with forces (2) and (3), which plays an essential role in the accretion theory. This force arises, e.g., while a star crosses a cloud of diffuse matter, due to curvature of trajectories of particles flying past this star. Dynamical friction force is most effective in the case of comparable masses of the body and the cloud and a minimum initial speed of their relative motion. Yet even under such conditions a complete braking of a foreign body approaching the cloud at a parabolic speed, is possible only after multiple passages. Duration of passages exceeds considerably the life time of interstellar clouds. This circumstance testifies against the hypothesis of accidental conversion of dwarf-stars into giants due to their sticking in massive clouds of diffuse matter and subsequent growth by accretion of interstellar substance. Examples show that in dynamics of the formed stellar systems it is always possible

Card 4/5

Force interaction of massive radiating bodies

32043
S/035/61/000/011/026/028
A001/A101

to restrict oneself to taking into account only conventional forces of gravitational interaction. There are 9 references,

B. Gel'fgat

[Abstracter's note: Complete translation]

Card 5/5

S/035/62/000/007/033/083
A001/A101

AUTHORS: Gaynullina, R. Kh., Idlis, G. M.

TITLE: On rotation and mass of the Large Magellanic Cloud

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 7, 1962, 45, abstract 7A331 ("Izv. Astrofiz. in-ta AN KazSSR", 1961, v. 12, 56 - 58; English summary)

TEXT: The rotation curve of the LMC derived from radial velocities of H II regions measured at the Mount-Stromlo Observatory is reconsidered. The calculated values of rotational velocities and their probable errors do not contradict the rotation curve obtained previously (RZhAstr, 1961, 2A541) and estimate of the LMC mass $M = (2.4 \pm 0.7) \cdot 10^9 M_{\odot}$.

I. P.

[Abstracter's note: Complete translation]

Card 1/1

IDLIS, G.M.

Existence and characteristics of three fundamental independent first motion integrals for an individual star which enter in the general expression for the phase density of self-gravitating star systems. Izv.Astrofiz.inst.AN Kazakh.SSR 11:3-40 '61.

(MIRA 14:3)

(Mechanics, Celestial)
(Stars)

IDLIS, G.M.; GAYNULLINA, R.Kh.

Applicability of the ergodic theorem to stationary axisymmetric
self-gravitating star systems. Izv.Astrofiz.inst.AN Kazakh.
SSR 11:41-53 '61. (MIRA 14:3)

(Mechanics, Celestial)
(Stars)

IDLIS, G.M.

Causation as the basis of cosmology. Izv. Astrofiz. inst. AN Kazakh.
SSR 12:37-55 '61. (MIRA 14:12)

(Cosmology)

(Causation)

s/035/62/000/006/043/064
A001/A101

AUTHOR: Idlis, G. M.

TITLE: Causality as a basis of cosmology

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 6, 1962, 70,
abstract 6A532 ("Izv. Astrofiz. in-ta AN KazSSR", 1961, v. 12, 37 -
55, English summary)

TEXT: The uniqueness of the Universe has the consequence that all its particular characteristics should be necessarily inherent to it, if the principle of causality holds in respect to the Universe. On this basis, the following universal cosmological principle is formulated: Any quantitative physical characteristic, when one goes over from an arbitrary observed part of the Universe to the Universe as a whole, either remains identically unchanged, or tends to infinity or to zero, or else becomes meaningless. The whole series of consequences is derived from this principle: 1) Directivity, one-dimensionality and endlessness of time flow; 2) tridimensionality and infinity of space; 3) connectivity of space-time; 4) absoluteness, on cosmological scale, of the special theory of re-

Card 1/2

Causality as a basis of cosmology

S/035/62/000/006/043/064
A001/A101

lativity and equivalence of the Universe as a whole to physical vacuum; 5) absence of a non-zero cosmological constant in equations of the general theory of relativity; 6) existence of the Planck constant and validity of the principle of uncertainty; 7) elementary reversibility and statistical irreversibility; 8) inverse-proportionality to distance square of gravitational action of a macroscopical spherically-symmetric body. There are 14 references. ✓

P. Kard

[Abstracter's note: Complete translation]

Card 2/2

S/505/61/012/000/005/007
E032/E514

AUTHORS: Idlis, G.M. and Obashev, S.O.
TITLE: The magnetic field and the period of rotation of Venus
SOURCE: Akademiya nauk Kazakhskoy SSR. Astrofizicheskiy institut. Izvestiya. v.12, 1961, 91-94

TEXT: A review of published information on the rotation of Venus lead the present authors to the conclusion that the period of rotation of Venus is of the order of 14 days, although it is pointed out that this estimate may be ~~of~~ but by not more than a factor of 2. If it is assumed that the magnetic moment of a planet is proportional to its rotational angular momentum and that the mass, the dimensions and the structure of Venus are similar to that of the Earth, then its magnetic moment turns out to be of the order of $6 \times 10^{25} / \text{T gauss.cm}^3$. On the other hand, J. Houtgast (Ref.21 Indication of a magnetic field of the planet Venus, Nature, 1955, 175, 4459, 678-679) has estimated that the magnetic moment should be greater by two orders of magnitude than that given by the above relation. The present authors argue that observations of strong auroras on Venus and their interpretation in terms of

Card 1/2

The magnetic field and the ...

S/503/61/012/000/005/007
E032/E514

radiation belts retained by the magnetic field and supplied by solar corpuscular streams tends to favour their estimate as opposed to Houtgast's estimate. The general conclusion is that the magnetic moment of Venus should be approximately

4×10^{24} gauss cm⁵. There are 27 references: 14 Soviet-bloc and 13 non-Soviet-bloc. The four latest English-language references read as follows: Ref.9: Firsoff V.A. Venus through colour filters, J Brit Astron. Assoc., 1957, 67, 2 66-75; Ref.10: Read P.A. The cloud markings of Venus. Some factors governing their visibility, South Stars, 1958, 17, 6, 92-96; Ref.17: Kraus J.D. Recent observations of radiosignals from Venus at 11 meters wave length A.J., 1957, 62, 1, 21; Ref 24: Warner D. The emission spectrum of the night side of Venus, M N, 1960, 121, 3, 279-283.

Card 2/2

S/503/61/012/000/007/007
E032/E514

AUTHOR: Idlis, G.M.

TITLE: The origin and size distribution of various dust particles in different layers of the Earth's atmosphere

SOURCE: Akademiya nauk Kazakhskoy SSR. Astrofizicheskiy institut. Izvestiya, v.12, 1961, 99-103

TEXT: In a previous paper the author showed that for a random disintegration of a quasi-uniform and isotropic body the number of fragments with effective radii lying between r and $r + dr$ is given by

$$dn_0(r) \approx k_0 r^{-4} dr.$$


(1)

This theoretical distribution is in good agreement with the observed distribution of major asteroids and therefore can be used as an argument in favour of the hypothesis that small planets appear as a result of the fragmentation of one or more major protoplanets between the orbits of Mars and Jupiter. It is now shown that the theoretical deductions reported in Ref.1 are in

Card 1/2

The origin and size distribution ... S/503/61/012/000/007/007
E032/E514

agreement with published experimental data on the size distribution of dust particles in the Earth's atmosphere. There are 12 references: 8 Soviet-bloc and 4 non-Soviet-bloc. The English-language references read as follows: Ref.5: Junge C.J. of Meteorology, 12, 1, 13, 1955; Ref.11: Hodge P.W. Nature, 178, No.4544, 1251, 1956; Ref.12: Hamenway C.L. and Fullam E.F. Identification of micrometeorites. Madison, Wisconsin, July 2, 1958.



Card 2/2

IDLIS, G.M.; KARYAGINA, Z.V.

Cometic nature of the Tunguska meteorite. Meteoritika no.21:32-43
'61. (MIRA 14:11)

(Podkamennaya Tunguska Valley—Meteorites)

24638

S/031/61/017/005/001/002
B117/B203

3.3100
3.2400

AUTHOR: Idlis, G. M., Candidate of Physics and Mathematics

TITLE: Conquest of cosmic space

PERIODICAL: Akademiya nauk Kazakhskoy SSR. Vestnik, v. 17, no. 5,
1961, 10-14

TEXT: In connection with the cosmic flight of the first astronaut Yu. A. Gagarin with the space ship "ВОСТОК" (Vostok), the author reports on some studies in the field of cosmic research made at the Astrofizicheskii institut AN KazSSR (Astrophysics Institute AS Kazakhskaya SSR). Academician V. G. Fesenkov ascertained, some years ago, the dustlike nature of the interplanetary medium scattering the sunlight on the basis of photometric and polarization observations of the zodiacal light. This theory was confirmed by results directly obtained with the aid of space rockets. Similar experimental confirmations can be expected for theoretical conclusions on the quality of the moon's surface. At the 5th Meteorite Conference in Moscow in 1953, the author dealt with the problem of shattering of solid bodies in the interplanetary space when they collide.

Card 1/4

24638

S/031/61/017/005/001/002
B117/B203

Conquest of cosmic space

He noted that in such a random shattering the size distribution of fragments in first approximation must be inversely proportional to the 4th power of the radius. This theoretical distribution law has been frequently confirmed. Recently, the author and S. O. Obashev had theoretically studied the problem of the magnetic field and the period of axial rotation of Venus. They found the magnetic moment of the order of magnitude

$4 \cdot 10^{24}$ gauss·cm³ and a period of about 2 weeks. They hope these results will soon be confirmed by direct measurements. D. A. Rozhkovskiy, Head of the otdel astrofiziki (Astrophysics Division), and his collaborators, did great work in the field of precise photographic observation of artificial earth satellites and of the artificial comet during the flight of the 2nd moon rocket. On the basis of an analysis of trajectories of artificial earth satellites, it will be possible to solve the problem raised by N. A. Kozyrev as to the north-south asymmetry of the earth. A checkup, made by T. B. Omarov and the author of N. A. Kozyrev's experiments with the anomalous deviation of bodies falling toward south yielded a negative result. V. B. Shikin, Graduate from KazGU (Kazakh State University), however, found a corresponding longitudinal asymmetry of the

Card 2/4

Conquest of cosmic space

24638
S/031/61/017/005/001/002
B117/B203

rotating electron cloud in his experiment with a diode in the magnetron. This asymmetry of rotating bodies in the direction of the rotational axis is incompatible with classical physics, and deserves close theoretical and experimental studies. D. A. Aleksandrov found that the space-time continuum of the universe as a whole had been described by Einstein's special theory of relativity. The so-called relativistic cosmological models, however, which are based on the general theory of relativity, do not describe the world as a whole but only individual cosmic systems therein, similar to our metagalaxy. These systems are finite and not isolated. Their totality must be considered on the background of the universe as a whole, i. e., with a plane (pseudo-Euclidean) metric in the infinity, without any cosmological constants differing from zero in the equations of the general theory of relativity. Our metagalaxy is by no means the whole universe. It is only a typical cosmic system. There must be life on corresponding planets revolving round certain stars in our galaxy and in other galaxies. Radioastronomers are already endeavoring to establish communications with rational beings who might populate planets in adjacent solar systems. By means of cybernetics it will be possible to decipher the language of other rational beings.

Card 3/4

APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R0005 32C
S/534/61/001/002/005
D055/D114

3,5920
AUTHOR: Idlis, G.M., and Karyagina, Z.V.

TITLE: The cometary nature of the Tunguska meteorite

SOURCE: Akademiya nauk SSSR. Komitet po meteoritam. Meteoritika, no. 21, 1961, 32-43.

TEXT: In conducting this study, the authors attempted to support the hypothesis that the Tunguska meteorite was the nucleus of a small comet which formed a tail before colliding with the Earth. Characteristics associated with the approach and explosion of the Tunguska meteorite are discussed and calculated. The estimated initial and final speeds of 60 km/sec and 6 km/sec indicate that the meteorite met the Earth travelling in a direction opposite to that of the Earth and the final mass of the meteorite exploded and dispersed in the Earth's atmosphere. I.S. Astapovich (Ref.3; Priroda, no.3, 1951, 13-23) made a direct estimate of the explosive force of the meteorite at 10²³ erg, which the authors find in agreement with their calculation figure. They estimate the change in the geomagnetic field in Irkutsk when the tail of the meteor collided with the Earth at about 3·10⁻⁴ gauss, which agrees fairly with the direct observations of K.G. Ivanov [Abstracter's note: see abstract 004 of this set]. The geomagnetic disturbance occasioned by

32138

S/534/61/000/021/002/005
D055/D114

The cometary nature ...

Meteorite]Izd-vo AN SSSR, 1949) and L. Apostolov, Director of the meteorological bureau of the Kubano-Chernomorskiy krayevoy institut (Kuban' and Black Sea Regional Institute), (Ref. 24: Mirovedeniye, no. 3, 1926). There is 1 table and 34 references, of which 27 are Soviet and 7 non-Soviet. The 3 English-language references are: F.J.W. Whipple, The Quarterly Journal of the Royal Meteorological Society, 56, N 236, 1930, 287-304; A. Chapman and K. Ferraro, Terrestrial Magnetism, 36, 77, 1931, 171; 37, 1932, 147; C.W. Allen, Astrophysical Quantities, London, 1955. X

Card 3/3

ADAMS, G.M.

Confirmation of the hypothesis of the origin of Magellanic
Clouds in the Galaxy as the result of a collision of the
Galaxy with the extragalactic nebula NGC 55. Astron. zhur.
38 no. 1:182-183 Ja-P '61. (MIA 14:2)

1. Astrofizicheskii institut AN SSSR.
(Milky Way) (Cosmogony)

IDLES, G.II.

Confirmation of the presence of a diffuse matter in globular
clusters. Astron. zhur. 38 no. 1:184-185 Ja-Y '61.
(ML-A 14:2)

1. Astrofizicheskiy institut AN KazSSR..
(Interstellar matter) (Stars--Clusters)

IDLIS, G.M.

Symmetry of self-gravitating stationary axisymmetrical stellar systems
relative to the equatorial plane. Izv.Astrofiz.inst. AN Kazakh.SSR
13:3-15 '62. (MIRA 15:6)
(Stars--Distribution)

IDLIS, G.M.; GAYNULLINA, R.Kh.; KURMAKAYEV, Z.Kh.

Visible contraction of far spherical components of multiple
galaxies due to the Einstein effect. Izv.Astrofiz.inst.AN
Kazakh.SSR 14:3-18 '62. (MIRA 15:8)
(Galaxies)

IDLIS, G.M.

Structure and dynamics of the Metagalaxy considering the dominating background of radiation. Izv.Astrofiz.inst.AN Kazakh.SSR
15:3-24 '62. (MIRA 16:1)

(Galaxies)

IDLIS, G.M.; KURMAKAYEV, Z.Kh.; OMAROV, T.B.

Structure and dynamics of cosmic systems in the metagalaxy. Izv.
AN Kazakh. SSR. Ser. fiz.-mat.nauk no.1:3-14 '63. (MIRA 17:4)

1961, G.M.

Probable nature of the magnetic fields of Venus and Mars. Izv.
AN Kazakh. SSR. Ser. fiz.-mat.nauk no.1:15-17 '63. (MIRA 17:4)

ACCESSION NR: AP4028473

S/0031/64/000/003/0084/0085

AUTHOR: Idlis, G. M. (Candidate of physico-mathematical sciences)

TITLE: Astrophysic in Kazakhstan

SOURCE: AN KazSSR. Vestnik, no. 3, 1964, 84-85

TOPIC TAGS: astronomy, physics, astrophysics, stellar kinetics, stellar dynamics, galaxy, galactic parameter, nebula, solar system, meteor

ABSTRACT: On the initiative of the Astrofizicheskiy instituta AN KazSSR (Astrophysical Institute AN Kazakh SSR), an All-Union conference was held October 10-16, 1963 at Alma-Ata on the kinetics and dynamics of the stellar systems and on the physics of interstellar space. The first half of the conference was devoted to a review of the data on stellar kinetics and dynamics. G. G. Kuzmin, corresponding member of the Academy of Sciences, Estonian SSR, delivered a report on the present problems of stellar dynamics, while I. L. Genkin discussed certain applications of stellar dynamics. T. A. Agekyan spoke on spherical stellar aggregations, and K. Veltmann discussed a generalized Shustar's model of the spherical stellar system. Other delegates presented papers on the distribution of density in stellar

Card 1/3

ACCESSION NR: AP4028473

systems and on the velocities of stars. The report of T. A. Agekyan's topic of the quasistationary state of stellar systems and stars evoked particular interest. G. G. Kuzmin and others discussed the hydrodynamics of stellar systems. S. A. Kutuzov, Ya. E. Eynasto, and I. L. Genkin dealt with the subject of galactic parameters. G. M. Iddis reviewed the problems of theoretical galactic models. A number of papers were devoted to the dynamics of galaxies and of their aggregates. The second part of the conference was given to the physics of interstellar space. In the opening address Academician V. G. Fesenkov outlined the problems dealing with this subject. D. A. Rozhkovskiy and others presented papers on the reflecting nebulae of great optical density and on the properties of interstellar dust. G. A. Gurzadyan discussed the gradient of electronic temperature in gaseous galaxies. Several papers were devoted to nebular spectra, the superstars, and the galactic magnetic field. On October 28-29, 1963, there took place at Alma-Ata another All-Union Conference on "The Earth as a Cosmic Body." It was opened by Academician V. G. Fesenkov with an address on the evolution and physical properties of the earth and planets, as a consequence of the peculiarities in their origin. This was followed by 11 papers on the solar system and on various aspects of the earth, including its origin, its age, the distribution of radioactive elements, and the role of meteors in shaping the earth's surface. The materials from this conference --

Cord 2/3

ACCESSION NR: APL028473

will be printed in a publication commemorating the 400th anniversary of Galileo's birth.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 17Apr64

ENCL: 00

SUB CODE: PH, AS

NO REF SOV: 000

OTHER: 000

Card 3/3

IDILIS, G.M., doktor fiziko-matematicheskikh nauk

Dynamics of stellar systems. Vest. AN Kazakh SSR 21 no.3:60-65 Mr
'65. (MIRA 18:5)

IDLIS, G.M.

Rational foundations and current problems in the theory of galactic models. Trudy Astrofiz. inst. AN Kazakh. SSR 5:105-178 '65.

Applicability of the theory of relativity in astronomy. Ibid.: 179-190

Relative luminosity of nebulae illuminated by stars. Ibid.: 262-267
(MIRA 18:6)

LIVSHITS, G.Sh.; FESENKOV, V.G., akademik, red.; IDLIS, G.M., doktor
fiz.-matem.nauk, zamestitel' red.; PYASKOVSKAYA, YE.V.,
doktor fiz.-matem.nauk, red.; ROZHKOVSKIY, D.A., doktor fiz.-matem,
nauk, red. toma; RUDINA, M.P., kand.fiz.-matem.nauk, red.;
ROZHKOVSKIY, D.A., doktor fiz.-matem.nauk, red.

[Light scattering in the atmosphere. Pt.1.] Rasselanie sveta v
atmosfera. Alma-Ata, Nauka. Pt.1. 1965. 176p (Akademiia nauk
Kazakhskoi SSR. Astrofizicheskii institut. Trudy, vol.6)
(MIRA 18:5)

GINZBURG, O.F.; KVIAT, E.I.; IDLIS, G.S.

Dyes with antipyrine rings. Part 8: Rate of conversion of dyes
to carbinol compounds. Zhur.ob.khim. 32 no.8:2633-2637 Ag '62.
(MIRA 15:9)

1. Leningradskiy tekhnologicheskii institut imeni Lensovet.
(Dyes and dyeing) (Antipyrine) (Alcohols)

25(2)

SOV/117-59-3-3/37

AUTHORS: Liberman, L.A., and Idlis, Ye.M., Engineers

TITLE: An Automat for Making Contacts (Avtomat dlya izgotovleniya kontaktov)

PERIODICAL: Mashinostroitel', 1959, Nr 3, pp 4 - 5 (USSR)

ABSTRACT: Detailed design and operation information is given on a new special grinding machine for electric contacts on hard metals. It accepts work of 4 mm diameter or 0.8 - 5 mm thickness and from 50 mm up to 4 meter length, working with a 200 mm diameter and 1 mm thick grinding wheel made with vulcanite for a binder. The design includes a photoelectric tracing device on the wheel slide, so mounted that the light beam cannot reach the photo-resistance behind the grinding wheel until the grinding wheel wears down to a certain diameter. The electric

Card 1/2

SOV/117-59-3-3/37

An Automat for Making Contacts

pulse then produced by the photo-resistance, switches-
in the compensation-feed mechanism. The machine is
illustrated by a diagram (Figure 1). It has been
tried out on tungsten rod with satisfactory results.
There are two diagrams.

Card 2/2

IDOMSKIY, B.M.; KOLOTIY, H.A., veter. vrach

Vaccination of poultry against infectious laryngotracheitis. Veteri-
nariia 40 no.5:38-39 My 63. (MIRA 17:1)

1. Glavnyy veterinarnyy vrach Ptitsesovkhoza-kombinata "Yuzhnyy",
Krymskoy oblasti (for Idomskiy). 2. Ptitsesovkhoza-kombinata "Yuzh-
nyy", Kryskoy oblasti (for Kolotiy).

IDOMSKIY, I.M.

Prophylaxis of poultry diseases in large-size poultry houses.
Veterinariia 39 no.8:19-21 Ag '62. (MIRA 17:12)

1. Glavnyy veterinarnyy vrach ptitseosovkhoza "Yuzhnyy",
Krymskoy oblasti.

KOPIT, B.S.; MIKHAYLOV, A.V.; CHLENOV, A.F.; IDOV, P.I.; YUKHNOV, I.I.;
TSARSKIY, S.V.; BARAUSOV, V.A.; PETROV, A.I.; LIFSHITS, L.Z.;
ABATUROV, K.I.; SOKOL'SKAYA, Zh.M.; MEZHEVICH, V.N.; DAVYDOV,
L.I.; VLASIKHIN, A.V.; CHEKALOV, L.N.; STARICHKOV, T.I.;
KHUBLAROV, A.Ye., red.; PITERMAN, Ye.L., red.izd-va; PARAKHINA,
N.L., tekhn.red.

[Our beacons; collection of articles on progressive workers in
lumber, paper, woodworking industries and forestry] Nashi maiaki;
sbornik ocherkov o peredovykh lyudiakh lesnoi, bumazhnoi i derevo-
obrabatyvalushchei promyshlennosti i lesnogo khoziaistva. Moskva,
Goslesbumizdat, 1961. 125 p. (MIRA 15:2)

(Forests and forestry) (Wood-using industries)

KARPOVA, M.P., dotsent, kand.fiziko-matem.nauk; DOVA, M.B., assistant

Corrugated rail wear. Trudy NII ZHT no.31:21-31 '62. (MIRA 16:9)
(Railroads--Rails--Testing)

IDRICEANU, T.; IORGA, N.; ERHAN, V.

Mineralogical research on some Sarmatian clays in the Moldavian Plateau. Pt. 2. Studii chim Iasi 14 no.1:103-111 '63.

1. Universitatea "Al. I. Cuza" Laboratorul de Mineralogie.

RUMANIA/Cosmochemistry. Geochemistry. Hydrochemistry.

D

Abs Jour: Ref Zhur-Khim., No 13, 1958, 42892.

Author : Savul Mircea, Idriceanu Traian.

Inst : Iasi University.

Title : Contribution to the Petrochemical Characterization
of Magmatic Massifs of Northern Dobruja.

Orig Pub: An. stiint. Univ. Iasi, 1956, Sec. 2, 2, No 2, 339-362.

Abstract: Recalculations are made of chemical analyses and variation diagrams, according to the method of A. N. Zavaritskiy, of two groups of rocks: 1) from granites to granodiorites and tonalites, and 2) gabbro. The possibility is discussed of a genetic connection between these groups, and of the effect of assimilation processes (in connection with the enclosing Paleozoic shales).

Card : 1/1

APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00051832

CATEGORY :

Cosmochemistry. Geochemistry. Hydrochemistry.

ABS. JOUR. : RZKhim., No. 16 1959, No.

56712

AUTHOR : Idriceanu, T.

INST. : Iasi University

TITLE : On the Mineralization of the Eastern Carpathians.
Mineralization of Sulfur Compounds in the Gemenea-
Ostra District (Suceava Region).

ORIG. PUB. : An Stiint Univ Iasi, Sec 2-3, no 1-2, 387-394
(1957)

ABSTRACT : The author presents results obtained in the course of an investigation of the geologic structure of the crystalline slates in the Eastern Carpathians and the related mineralization resulting in the formation of quartz-baryte veins containing pyrites, galenites, and chalcopyrites. The structural and mineralogic study of the ore deposits points to their hydrothermal origin with superimposed metamorphism, resulting in the appearance of secondary phenomena and changes in the structure of the deposits.

G. Volkov

CARD: 1/1

IDRICHANU, T., dotsent; POMYRLYANU, V., nauchnyy sotrudnik

Mirchi Savul, 1895-1964; obituary. Geokhimiia no.3:376-377 Mr '65.
(MIRA 18:7)

IDRISOV, A.S., kand.med.nauk

Organization of first aid among agricultural workers. Zdrav.
Kazakh. 17 no.6:26-28 '57. (MIRA 12:6)

1. Kzyl-Ordinskogo oblastnogo otdela zdravookhraneniya.
(KZYL-ORDA PROVINCE--MEDICINE, RURAL)

IDRISOV, A.S., kand.med.nauk

Characteristics and prevention of accidents in rice production.
Zdrav.Kazakh. 17 no.7:7-11 '57. (MIRA 12:6)

1. Glavnyy khirurg Kzyl-Ordinskogo obl'sdravotdela.
(KAZAKHSTAN--AGRICULTURE--ACCIDENTS)
(RICE WORKERS--DISEASES AND HYGIENE)

IDRISOV, A.S.

Treatment of tuberculous peritonitis with streptomycin. Trudy Semipal.
med. inst. 2:174-179 '59. (MIRA 15:4)

1. Iz kafedry obshchey khirurgii Semipalatinskogo gosudarstvennogo
meditsinskogo instituta (zaveduyushchiy A.S.Idrisov).
(STREPTOMYCIN) (PERITONEUM--TUBERCULOSIS)

IDRISOV, A.S., dotsent

Recurrent echinococcosis. Trudy Semipal. med. inst. 2:284-294 '59.
(MIRA 15:4)

1; Iz kafedry obshchey khirurgii Semipalatinskogo gosudarstvennogo
meditsinskogo instituta (zav.kafedroy - dotsent A.S.Idrisov).
(HYDATIDS)

IDRISOV, A.S., dotsent

Surgery on the peripheral nerves in leprous patients.
Zdrav. kazakh. 22 no.1:8-11 '62. (MIRA 15:3)
(LEPROSY)
(NERVES, PERIPHERAL---SURGERY)

IDRISOV, A.S., dotsent

Transplantation of skin from the hairy portion of the scalp for
restoration of the eyebrows in leprous patients. Zdrav.Kazakh.
22 no.7:14-15 '62. (MIRA 16:1)
(LEPROSY) (EYEBROWS—SURGERY)(SKIN GRAFTING)

IDRISOV, A.; ABDULGAFAROV, Ye., red.; GOLUBEV, I., red.

[Surgery in leprosy] Khirurgiia lepy. Alma-Ata, Kaz-
gosizdat, 1963. 277 p. (MIRA 17:6)

IDRISOV, D.V.; ICHILLOV, A.P.

Basic aspects of the prophylactic operation of UDU systems
and methods for their elimination. Transl. from Russ. text. 1
reproduced. no.5:27-33 '84. (RUK4 17:0)

1. Makhachkalinskaya porovalchennaya nefteprom.

IDRISOV, G., brigadir prokhodchikov

Miners' work of honor. Sov.profssoiuzy 7 no.8:46-47 Ap '59.
(MIRA 12:7)

1. Shakhta imeni Stalina tresta "Stalinugol" Kemerovskoy oblasti.
(Kemerovo Province--Coal miners) (Labor productivity)

IDRISOV, I.M.

Content of sulfhydryl groups in leucocytes of the peripheral
blood in nuclear schizophrenia patients. Report No.1. Zhur.
nevr. i psikh. 64 no.9:1356-1359 '64. (MIRA 17:12)

1. Kaf. 'ra psikhatrii (zaveduyushchiy - prof. V.I. Glasov)
Dagestanskogo meditsinskogo instituta, Makhachkala.

121500, K.

AKHINZHANOV, M., redaktor; AKHMETOV, Z., redaktor; BEKKHOZHIN, Kh., redaktor;
SAYKIYEV, Kh., redaktor; SIL'CHENKO, M., redaktor; SMIRNOVA, N.,
redaktor; BERNSTEIN, S.A., redaktor; IDRISOV, K., redaktor; BOROKINA,
Z.P., tekhnicheskii redaktor

[Life and works of Abai; a collection of articles] Abaidyn omiri men
tvorchestvo. Zhizn' i tvorchestvo Abaia; sbornik statei. Pod red.
M.Akhinshanova i Z.Akmetova. Alma-Ata, 1954. 269 p. [In Kazakh and
Russian] (MIRA 9:12)

1. Akademiya nauk Kazakhskoy SSR, Alma-Ata. Institut yazyka i
literatury.

(Kunanbaev, Abai, 1845-1904)

IDRISOV, K.D.

Species of the genus *Harmodia* Hbn. in the Caucasus [with summary in English]. Zool.shur. 38 no.1:76-81 Ja '59. (MIRA 13:4)

1. Chair of Zoology, Daghestan State University, Makhachkala.
(Caucasus--Owlet moths)

IDRISOV, M., inzh.

Device for cutting meat, fish, and other products. Mias.ind.SSSR
31 no.2:47-48 '60. (MIRA 13:8)
(Food industry--Equipment and supplies)

IDRISOV, M. (g.Leningrad)

Lever knife for cutting meat and fish. Sov.torg. 33
no.8:49-50 Ag '60. (MIRA 13:8)
(Kitchen utensils)

AUTHOR: Idrisov, M.M. 208
TITLE: The cabin of a tower crane. (O kabine bashennogo krana.)
PERIODICAL: "Mekhanizatsiya Stroitel'stva" (Mechanisation of Construction),
1957, Vol. 14, No. 1, pp. 26 - 27 (U.S.S.R.)
ABSTRACT: The location of the crane operator's cabin is investigated. The ideal positioning would be on the level of the floor which the crane serves. Labour waste occurring up to now, when work had to be stopped whilst the crane was working overhead, could be eliminated by this arrangement. When operating the crane M - 3 - 5 - 10 the operator does not always have a clear view of the working platform and this causes frequent accidents. He has to rely on signals given by other workers which could be misunderstood. The crane operatives are requesting cabins which could be lifted according to the required working level. The described cabin can be positioned by using the lifting winch of the crane and a platform on which the cabin can be placed and re-positioned at a required level. Requirements of a well-designed cabin are discussed. There are 5 diagrams.

IDRISOV, M.M. (Moskva)

Hygienic and technological requirements in the construction of tower crane cabins. *Stroitel'stvo i prof.sab.* 3 no.6:45-48 N-D '59.

(MIRA 13:4)

(CRANES, DERRICKS, ETC.)

IMELON, N.N.

Efficient designs of tower-crane beams. Mekh. stroi. 1960. 1:1-
1961. (Cranes, derricks, etc.)

DEMENT'YEVA, M.I., kand. sel'skokhoz. nauk; IDRISOV, S.; ISAKOV, A.,
entomolog; GUREVICH, Kh.S., sadovoi-lyubitel'

For the amateur fruit grower. Zashch. rast. ot vred. i bol.
9 no.2:40-41 '64. (MIRA 17:6)

1. Glavnyy agronom entsukul'skogo proizvodstvennogo uprav-
leniya Dagestanskoy SSR (for Idrisov). 2. Entsukul'skoye
proizvodstvennoye upravleniye Dagestanskoy SSR (for Isakov).

IDRISOV, T. (Makhachkala)

Unnecessary duplication. Sov. tog. 37 no.10:46-47 0 '63.
(MIRA 17:1)

ISMAYLOV, K.A.: IDRISOV, V.G.

Nature of changes in the petroleum picture according to stratigraphic depth in the Kala field (Apscheron Peninsula). Dokl. AN Azerb. SSR 16 no. 4: 349-352 '60. (MIRA 13:7)
(Apscheron Peninsula--Petroleum--Geology)

ISMAYLOV, K.A.; IDRISOV, V.G.

Some tectonic features of the Zyrya deposit. Dokl.AN Azerb.SSR.
17 no.11:1059-1063 '61. (MIRA 15:2)

1. Institut geologii AN AzSSR. Predstavleno akademikom AN AzSSR
A.D.Sultanovym.
(Zyrya region--Geology, Structural)

ISMAYLOV, K.A.; IDRISOV, V.G.

Features of the structural development of the Zyrya field. Azerb.
neft.khoz. 40 no.8:1-3 Ag '61. (MIRA 15:2)
(Apsheron Peninsula--Geology, Structural)

IDRISOV, V.G.

Changes in the properties of oil during the development of pools as
revealed by the study of the Kala and Karachukhur-Zykh fields.
Izv. AN Azerb. SSR Ser.geol.-geog. nauk i nefti no.2:23-32 '62.

(MIRA 15:6)

(Apsheiron Peninsula—Oil reservoir engineering)

ISMAYLOV, K.A.; IDRISOV, V.O.

[Oil and gas pools of the eastern part of the Apsheron Peninsula] Zalezhi nefti i gaza vostochnoi chasti Apsheron-skogo poluostrova. Baku, Izd-vo AN Azerb.SSR, 1963. 158 p.
(MI:RA 17:5)

IDRISOVA, L.A.

Electrophysiological characteristics of cerebral cortex function
in a pain reaction. Report No. 1. Zdrav. Kazakh. 22 no. 3: 51-54
'62. (MIRA 15:12)

1. Iz kafedry patofiziologii (zav. - prof. T.A. Nazayeva)
Semipalatinskogo meditsinskogo instituta.
(PAIN) (CEREBRAL CORTEX) (ELECTROENCEPHALOGRAPHY)

IDRISOVA, L.A.

Electrophysiological characteristics of the functional state
of the cerebral cortex during pain reaction. Report no.2.
Zdravookhr. Kazakh. 23 no.1:59-60 '63 (MIRA 17:2)

1. Iz kafedry patologicheskoy fiziologii (zav. - prof. T.A.
Nazarova) Semipalatinskogo meditsinskogo instituta.

1970. 1.1.; 1971. 1.1.; 1972. 1.1.; 1973. 1.1.

Forms of the occurrence of some trace elements in lake sediments.
Vest. AN Kazakh. SSP 20 no.8:18-23 Ag 1(4).

(MIRA 17:11)

IRISOVA, R.A.; BEKTUROV, A.B.; MUN, A.I.

Cobalt, nickel, copper, and zinc content of lakes and rivers of Central
Kazakhstan. Trudy Inst.khim.nauk AN Kazakh.SSR 10:88-93 '64.
(MJRA 17:10)

1. IDSON, P. F.

2. USSR(600)

Methods of Determining Soil Moisture Content as a Quantative
Indicator of Melted Snow Infiltration.

9. Meteorologiya i Gidrologiya, No. 3, 1949. ~~Report~~ Report
U-2551, 30 Oct. 52.

~~CONFESCU, V., Dr.;~~ IDU, S., dr.; TANEA, E., dr.; THEODORESCU, B., Prof.

Electrophoresis in endocarditis lenta. Med. int., Bucur. 7 no.4:
143-147 Oct-Dec 55.

1. Clinica medicala IPSMF, Spitalul Coltea-Bucuresti.
(ENDOCARDITIS, SUBACUTE BACTERIAL, blood in
protein determ., electrophoresis, diag. value)

DLMITRIU, Victor, Conf.; TINCU, S., dr.; POPA, M., dr.; STEFAN, I., dr.;
IDU, S., dr.

Cardiac insufficiency; relation to metabolism of electrolytes
and water. Med. int., Bucur. 8 no.3:391-395 July 56.

1. Lucrare efectuata in Clinica medicala I.P.S.M.F. Spitalul
"Coltea."

(CONGESTIVE HEART FAILURE, metabolism
electrolytes & water)

(BODY FLUIDS

water-electrolyte balance disord. in congestive heart
failure.)

IDU, S.M.; STAN, Maria; MUNTEANU, Maria; POPESCU, P.; GHERASIM, L.; THEODORESCU, B.

The Kunkel test (KL 12) in hyperlipemia. Probl. card., Bucur. 4:
81-87 '59.

(LIPIDS, blood)

(CHOLESTEROL, blood)

(PHENOLS)

THEODORSCU, B., Prof.; POPESCU, P., dr.; IDU, S. M., dr.; STAN, M., chimist; NEGUS, I., dr.; GHERASIM, L., dr.

Contributions to the humoral study of coronary atherosclerosis.
Med. intern., Bucur 11 no. 5: 673-682 '60.

1. Lucrare efectuata in Clinica medicala a Spitalului "Coltea",
Bucuresti.

(CORONARY DISEASE metabolism.)

(LIPIDS, blood)

(CHOLESTEROL, blood)

(KIDNEY FUNCTION TESTS)

IDU, S.M., dr.; COCIUMIAN, Lucia, chimist.

Simplified method of glutamic-oxalacetic transminase determination.
Med. intern., Bucur. 11 no.5:783-787 '60.

1. Incrarea efectuata in laboratorul de biochimie al Clinicii
medicale "Coltea", Bucuresti, director: prof. B. Theodorescu.
(TRANSMINASES, blood)

THEODORESCU, B., prof.; POPESCU, P., dr.; IDU, S.M., dr.; GHERASIM, L., dr.
COCIUMIAN, L.; NEGRUS, X., dr.; STAN, M.

Humoral investigations in coronary atherosclerosis. Med. intern.,
Bucur 12 no.7:1013-1020 J1 '60.

(CORONARY DISEASE, blood) (WATER-ELECTROLYTE BALANCE)
(LIPIDS, blood) (CHOLESTEROL, metabolism)

I 80, S. M.

IDU, S. M.

RUMANIA

MD

Medical Clinic at the "Coltea" Hospital" (Clinica Medicala
"Coltea"), Bucharest.

Bucharest, Viata Medicala, No 1, 1 Jan 63, pp 55-58.

"Observations on the perfecting of the paper electrophoresis
apparatus."

IDU, S.M., Dr.

RUMANIA:

Medical Clinic III, "Colțea" Hospital (Clinica a III-a
medicală, Spitalul "Colțea"), Bucharest.

Bucharest, Viata Medicală, No 12, 15 Jun 63, pp 795-807

"Current Conception of Dysproteinaemia. Clinical Value
and Interpretation."

(1)

CAPRIOARA, D., prof.; COJA, N., conf.; SASU, V., conf.; RUSU, O.; IDU, V.; PANEA, E.; TURCAS, S.

Staphylococcal infections in gynecology and obstetrics. Microbiologia (Bucur) 6 no.1:22-23 Ja-F '61.

TELESZYNSKI, Zdzislaw; BILIK, Adam; IDZIAK, Jozef

Results of treatment of spinal fractures associated with spinal cord injuries in a country hospital. Chir. narz. ruchu 22 no.4:415-417 1957.

1. Z Oddzialu ortopedyczno-urazowego Miejskiego Szpitala im. Wl. Bieganskiego w Czestochowie. Ordynator: dr Z. Teleszynski. Czestochowa, ul. Mickiewicza nr 12.

(SPINE, fractures

causing spinal cord inj. surg. (Pol))

(SPINAL CORD, wds. & inj.

caused by fract. of spine, surg. (Pol))

IDZIAKOWSKI, Zdzislaw; LENKIEWICZ, Wladyslaw (Warszawa)

Factory hall composed of umbrellalike roofs. Pr. 21 budowl
i bud mieszk 33 no.3:148-151 Mr'61.

IDZIKOWSKI, A.
IDZIKOWSKI, A.

W. Kemula and A. Hulanicki's Spektralna analiza emisja (Emission-Spectrum Analysis):
a book review.

p. 415 (Wiadomosci Chemiczne) Vol. 11, no. 7, July, 1957, Wroclaw, Poland

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958

IDZIKOWSKI, Andrzej

Occurrence of certain trace elements in bituminous coal from
Upper Silesia. Archiw min 23 no.2:271-351 '59 [publ. '62].

1. Department of Inorganic Chemistry I, Polytechnic, Wrocław,
and Institute of Physical Chemistry, Polish Academy of Sciences.

IDZIKOWSKI, Andrzej

The problem of precision of the quantitative spectral analysis
in geochemical research. Chemia anal 7 no.1:131-132 '62.

1. Department of Inorganic Chemistry I, Polytechnical
College, Wroclaw.

IDZIKOWSKI, Jerzy

"Qualified workers in Poland" by Michal Charkiewicz. Reviewed by
Jerzy Idzikowski. Praca zabesp spol 4 no.1:83-86 '62.

IDZIKOWSKI, Jerzy

"The problem of working hours" by Jan Rosner. Reviewed by Jerzy Idzikowski. Praca zabezp spol 4 no.9/10:136-140 S-0 '62.

IDZIKOWSKI, Jerzy, mgr

Evaluation of labor. Przegl techn 84 no.3:3 20 Ja '63.

①
POLAND

LEWANDOWSKI, Anna, prof. dr; IREKOWSKI, Sylwester, dr

Dept. of General Chemistry, University of Poznan (Katedra Chemii
Organicznej Uniwersytetu im. A. Mickiewicza, Poznan) (for both)

Warsaw, Chemia analityczna, No 3, May-June 1966, pp 611-616

"Ferric oxides and hydroxides as chromatographic sorbents. Part 3:
modifying of sorption properties of ferric oxide."

IDZINSKY, Oskar, ins.

Mechanical properties of welded joins in aluminium alloys 424400,7.
Zvaranie 10 no.11:330-335 N '61.

1. Vyskumny ustav svaroosky, Bratislava.

"APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00051832

APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00051832(

LULKIEWICZ, L.

...is vitreous and translucent gold and a medium and uniform structure. The grade of necessary hardness obtained showed but small discrepancies. Observations made justify the assumption that the actual temperature in which the grinding wheels were fired was at least two Seger cones below that of the furnace. 2) The following experiments were carried out at No. 2 Works: all grinding wheels experimented with were of a combined grain number. The grain combinations were:

electro-corundum wheels: 36₄M: No. 20-25%, No. 28-50%, No. 40-25%
36₄P: No. 20-25%, No. 28-50%, No. 40-25%
60₄: No. 60-25%, No. 60-30%, No. 70-25%
carbocorundum wheels: 18₄: No. 18-10%, No. 18-40%, No. 20-10%

193 19303, Z.

Grinding machines, their defects and their control. p. 119

193 19303, Z. vol. 28, no. 11, Nov. 1955

Poland

so. EAST EUROPEAN ACQUISITIONS LIST vol. 5, no. 10 Oct. 1956